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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/994,829	11/28/2001	Yukinori Matsumoto	990191B	1134
38834	7590	11/29/2005	EXAMINER	
WESTERMAN, HATTORI, DANIELS & ADRIAN, LLP 1250 CONNECTICUT AVENUE, NW SUITE 700 WASHINGTON, DC 20036			SAJOUS, WESNER	
			ART UNIT	PAPER NUMBER
			2676	

DATE MAILED: 11/29/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/994,829

Applicant(s)

MATSUMOTO ET AL.

Examiner

Wesner Sajous

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 September 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 43, 47, 48, 50, 54, 55, 57, 61, 62, 64-81 and 95-97 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 47, 48, 54, 55, 61-81 and 95-97 is/are allowed.
- 6) ☒ Claim(s) 43, 50 and 57 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 9/3/04.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

Remark

1. This communication is responsive to the amendment and response dated September 13, 2005. Claims 43, 47, 48, 50, 54-55, 57, 61-62, 64-81, and 95-97 are presented for examination.

Response to Arguments

2. In response to the Applicant's argument that the Suzuki reference fails to teach the concept of averaging pixel information in an object image each for a region as a process (or the equivalence) of consolidating pixel information, the Examiner respectfully disagrees. For, at lines 37-42 of col. 6 of Suzuki, it is suggested that average value of pixel block of each color component is calculated for each region of a divided image. In view of the above, it is noted that since Suzuki teaches the concept of averaging pixel information each region in an object image, Suzuki, therefore, teaches the equivalence of consolidating pixel information by extraction and identifying. For, since Suzuki divides and calculates the average value of each pixel block, it is obvious that, in the process, the divided portion of the image object would need be identified and extracted, in order to result to the calculated average pixel information for each region in the object image. In view of the above, it is respectfully submitted that Suzuki teaches the process of consolidating information of each pixel regions and, Suzuki, when combined with Hsu, and Avinash, meets applicant's claimed invention. Thus, the rejections are sustained.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 43, 50, and 57 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hsu (US Pat. # 6151424) in view of Avinash (US Pat. # 5832134) and further in view of Suzuki (6118552).

Considering claim 43, Hsu and Avinash render obvious most claimed features of the invention as set forth in the previous office action, paper # 7; however, Hsu and Avinash fail to teach averaging information of each pixel in an object image each for a region (as the process of consolidating information for pixels of an image region).

Suzuki, in a similar art, teaches the concept of averaging information of each pixel in an object image each for a region [as the process of consolidating information for pixels of an image region]. See col. 6, lines 37-46. The Applicant is duly noted that in calculating the average data value of a pixel block, each and every pixel information of the image block is considered for the averaging and/or the consolidating step.)

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the features of Hsu and Avinash to include the calculated averaging information of each pixel in the same conventional manner as taught by Suzuki, in order to efficiently encode an image from an original document

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including a combination of monochrome and color regions. See Suzuki's col. 1, lines 10-12.

Claim 50 contains features that are analogous to the limitations recited in claim 43. Claim 50 is therefore rejected for the same reason.

Claim 57 is a computer program product performing the same method as apparatus claim 43 it is, therefore, rejected for the same reasons and rationale set forth for claim 43.

Allowable Subject Matter

5. Claims 47, 48, 54-55, 61-81, and 95-97 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action.

Reason for Indicating Allowable Subject Matter:

Claims 47, 48, 54-55, 61-62, 67-81, and 95-97 are allowed for reasons indicated in the previous office actions. Claims 64-66 are allowed because the prior art fails to teach "extracting as object portion a region having a mean value smaller than a predetermined threshold out of a plurality of regions. As a result, the limitations of claims 47, 48, 54-55, 61-81, and 95-97 are allowed over the prior art.

Conclusion

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sajous Wesner whose telephone number is 571-272-7791. The examiner can normally be reached on Mondays thru Fridays between 11:00 and 7:00 PM.

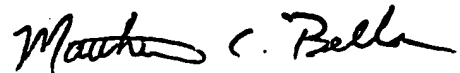
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Matthew Bella can be reached on 571-272-7778. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Wesner Sajous -WS-

11/21/2005



MATTHEW C. BELLA
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600